

Claims

- [1] A construction method for PSC simple girder bridges comprising the steps of:
tensing a first tendon (2) as much as a PSC girder (1) manufactured in such a manner to insert at least two or more tendons therein endures self-weight thereof, and spanning the PSC girder (1) between bridge seating devices (5) located on piers (4);
gradually tensing second tendons (3) while precast slabs (6) are arranged at regular intervals on the top surface of the PSC girder (1);
compounding the precast slabs (6) and the PSC girder (1) using filling material such as concrete or mortar; and
installing additional dead load means (9) such as packing on the compounded structure of the precast slabs (6) and the PSC girder (1).
- [2] A construction method for PSC continuous girder bridges comprising the steps of:
tensing first tendons (2) as much as PSC girders (1), which are manufactured in such a manner to insert at least two or more tendons therein, endure self-weight thereof, and continuously spanning the PSC girders (1) between bridge seating devices (5) located on piers (4) to have two or more spans;
installing and connecting sheath pipes for passing second tendons (3) therethrough in spaces between the PSC girders (1), and pouring concrete for connection parts (7);
tensing second tendons (3) while precast slabs (6) are arranged at regular intervals on the top surface of the PSC girder (1);
compounding the precast slabs (6) and the PSC girder (1) using filling material such as concrete or mortar; and
installing additional dead load means (9) such as packing on the compounded structure of the precast slabs (6) and the PSC girder (1).
- [3] The construction method for PSC continuous girder bridges according to claim 2, wherein when the concrete for the connection parts (7) is poured, concrete for slabs is simultaneously poured adjacent to continuous spot portions, the precast slabs (6) are put and compounded only adjacent to the continuous spot portions, so that compression stress is applied to the slabs adjacent to the continuous spot portion during the second tense.
- [4] The construction method for PSC continuous girder bridges according to claim

2, wherein some of the first tension force of the first tendons (2) is applied to only portions where static moment is applied, but not to ends of continuous spot portions but, so that excessive compression stress is prevented from being generated on the lower edge portion of the girders adjacent to the continuous spot portions when load is applied to the continuous girders or the completed continuous bridge.